

### LITERACY TRAINING METHOD

This invention relates to a method for teaching reading to learning disabled students of varying capabilities in a group environment in accord with provisions of the federally mandated Technology-Related Assistance Act of 1988 and the Disabilities Act of 1990. The method provides numerical correlation with text in a manner which enables rapid communication among the teacher and each individual student for convenient control of individual student focus and understanding, particularly to accommodate the teaching of reading to learning disabled students. The method has particular utility in classroom reading instruction and enables a teacher to continually re-focus individual students to conceptual understanding of the vocabulary and specific textual content during a reading lesson. The method has utility in adult literacy programs, life skills and vocational education programs, teaching foreign languages, and teaching people with limited English skills.

### BACKGROUND OF THE INVENTION

The ability to process and retrieve information varies widely among students for many reasons. Many explanations concerning the discourse in literacy learning are associated with neurological and/or cultural deficits. Variations in the speed and capability, particularly of students learning to read, has been a problem in modern society which relies upon the teaching professional to teach several students of diverse abilities in a classroom atmosphere.

Learning to read requires multiple skills, particularly the visual association of text with meaning, the association of meaning with sound, and the connection of content with literal and inferential understandings and application.

5 A common method of teaching reading in group environments is for the teacher to model read or have individual students read aloud selected passages of text, with other students following the written text, the teacher correcting the student's pronunciation of text during recitation and contributing restatements of literal and inferential meaning of the textual matter being read. Each student  
10 in the class gets the benefit of each other student's recitation and confirmation of the correct pronunciation from the teacher as well as contextual literal and inferential meanings of the words being viewed and spoken.

15 It is not unusual that a group classroom comprises learning disabled with reading deficits, low-achieving and non-disabled students, that during the course of such students following text being recited by another that individual students become confused from visually identifying a word or group of words in text while they are being recited, or lost because of comments made by the  
20 teacher regarding meaning of the text. In a typical classroom with young students, the focus of an individual student can be easily disrupted by external events or a failure to rapidly identify a word or phrase, or even unfamiliarity with a word or phrase,

leaving the student confused as to where in the text the recitation has progressed at any given time during the recitation. In classrooms with learning disabled students, focus of an individual student is often subject to neurological problems which even further exacerbates the problem of individual students learning to read and presents even greater problems for a single teacher trying to teach two or more students in a session.

When individual students become confused as to what words or text are being recited, they are generally reluctant to alert the teacher and soon the student becomes hopelessly lost. Teachers generally control such problem by their skilled observation of students during the process, and their ability to intuitively recognize when a student has become confused. Usually the teacher interrupts the recitation or mingles among the students pointing to the place in the text where the recitation has progressed, to give the individual student a bearing. Intuitive recognition skills of teachers vary and interruption usually involves significant explanation on the part of the teacher to get all of the group of students back to the same spot, thus the process is only as good as the individual teacher and considerably slows the rate of teaching and minimizes the amount of time spent on reading.

Variability in literacy learning has been an ongoing concern. The teaching professional is left with the dichotomy of either slowing down the teaching process to accommodate the learning

disabled or struggling non-disabled student to the disadvantage of the more skilled, or maintaining a fast pace of teaching wherein the less able fall behind. These variations in ability were responsible for the past underlying assumption that different textbooks for low, middle and high reading group instruction would be beneficial for literacy development of all students. Equally discouraging is the continuation of children's low achievement from the delivery of reading instruction.

Attempts have been made to form classes into more closely equivalent learning groups, but such equivalency is difficult to assess and can still work to the disadvantage of those who fall marginally within its boundaries.

Of particular concern are those struggling students who may have learning disabilities which require constant refocusing by the student to overcome. Even in an ideally equivalent grouping, such students tend to need more personal supervision and input from the teaching professional. Such needs are time consuming and undercut the economics and efficiencies of classroom teaching. School systems have sought to resolve the problem by augmenting their classroom staff with remedial reading and special education professionals who interact with individual students in separate sessions, in addition to and/or together with group classroom work. Such augmentation is expensive and can deny the struggling reader the full benefit of the classroom experience enjoyed by their

classmates. To segregate children by ability stigmatizes and creates detrimental emotional problems which block motivation and becomes more harmful for academic growth.

It is an object of the present invention to provide an improved method for the teaching of reading skills which has application through a broad spectrum of students.

It is another object of the invention to provide a method for teaching reading which enables quick re-orientation of a student during textual reading lessons.

It is a further object of the invention to provide a method for enabling the teacher to quickly and effectively focus the student to a precise reading point.

These and other objects of the invention will be apparent from the following description of the invention.

#### SUMMARY OF THE INVENTION

In its most general embodiment, the present invention comprises a process for teaching individuals of disparate reading capability within a group environment how to read, the method broadly incorporating the correlation of textual material to a sequential numbering system, to enable registered reference for individual focus.

It is known, that students of all ages and learning disabilities, can be taught to count, recognize the sequential

order of numerals and retain such recognition much easier than they can be taught the association of textual language, meaning, sounds and understanding of the written language. Children, beginning from age about 3 can be generally taught numerical counting and visual recognition of sequential order of numbers from 1 to 10, and by the time they are 5-6 years old have a significant mastery and recognition of the progressive numerical sequence of numbers to about 100 or above. Even low achieving students and those having moderate to severe learning disabilities, are generally familiar with number recognition and retain recognition of the sequential progression of numbers. Thus, most non-reading students beyond the age of about 4, when told or shown a specific number, can find that number in a written document containing a plurality of sequentially presented numbers.

The present invention takes advantage of the ease in which non-reading students can identify specific numbers to augment teaching of reading by a teacher among a group of differently capable struggling readers and/or elementary reading students.

The method of the invention generally comprises segmenting written text into situational defined elements, such as words, phrases, sentences, lines and the like, each segmented element of text being sequentially numerically registered, the defined elements being determined based upon the range of capabilities within the group of students being taught reading. The numerically

segmented text is then provided to the student and in the course of common oral recitation, the teacher identifies words and phrases by referencing the student to corresponding numerical designations in accord with their ability.

In one embodiment of the invention, a textual document provided for reading by a group of students evaluated as primarily containing first time readers who have little if any textual word recognition or have severe reading dysfunctionality, comprises a sequential numerical registration of each word of the text. In another embodiment, a group evaluated as comprising elementary readers having select word recognition or moderate reading dysfunctionality, may use a textual document comprising a sequential numerical registration of phrases in the text or merely select words of the text.

In a preferred embodiment of the invention, particularly suitable for use with fourth through sixth grade students who have moderate to severe reading dysfunction, a textual document is arranged such that each line of text is presented in clear block letters within a distinct rectangular box marked outline and each word within a rectangular box outline is consecutively superscript numbered at the top right thereof. Numbering in each following rectangular boxed line of text is consecutive with the former rectangular boxed line of text, such that each word, in for example a single page document containing 50 words, will have a distinct

superscript number from 1-50. In a particularly preferred embodiment, the block letter text is in bold print, the superscript numbering is shaded lighter than the text and the rectangular outline is in a significantly subdued shade. In an even further preferred embodiment, the paper upon which the document is printed is an off-white color such as cream or ivory, each word of text and each line of text being separated from each other by exaggerated spacing.

In one method of the invention, the teacher directs the students to count down an appropriate number of blocks or lines of text to a particular numbered word, or merely identify the numbered word in the document for reference by the student. The teacher may read the text aloud, with reference to a numbered word which is being recited as may be desired, or may reference a numbered word or block for a student to recite. In a particularly preferred embodiment, students are seated at independent reading stations with each student being in independent communication with an audio device which provides a recorded recitation of the text of the document with instructions being referenced to the student in numbered sequences.



### BRIEF DESCRIPTION OF THE DRAWINGS

FIG 1 illustrates a textual document numerically referenced for 8-10 year old students who have severe reading deficit or dysfunction.

FIG 2 illustrates the textual document of FIG 1 numerically referenced for 8-10 year old students who have moderate reading deficit or dysfunction.

FIG 3 illustrates the textual document of FIG 1 numerically referenced for 8-10 year old students who have mild reading deficit or dysfunction.

### DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings, therein FIGS 1-3 illustrate the same page of a textual document in different numerically referenced embodiments to show the manner of use of the method of the invention within a group of disparate capability students.

In FIG 1, all words in the text comprise a superscript numerical reference number and all lines are rectangularly blocked, the document being specifically referenced for 8-10 year old students who have severe reading deficit or dysfunction. In the method of the invention, each severe deficit or dysfunctional student is provided with the document and the teacher recites or directs a student to recite or read along a line of textual material contained in a first box outline, by either identifying a

superscript number contained at the top right of the first word in the box outline or by having the student count down or up to the box outline. As the teacher observes the behavior of the various students in either an oral reader's pronunciation of words or confusion of a reader following the text, the teacher may correct pronunciation or direct the class or a particular student to a particular word by reference to both its sound and its numerical designation. As the teacher desires to reinforce the pronunciation, meaning, tense or otherwise characterize a word or phrase the teacher can do same by reference to the numerical designation of the particular word or words comprising the phrase.

In FIG 2, the text is exactly the same as FIG 1 and all lines are rectangularly blocked exactly the same, but a reduced number of words in the text comprise superscript numerically referenced numbers, the document being specifically referenced for 8-10 year old students who have slightly less (e.g. moderate) reading deficit or dysfunction than those using the text of FIG 1. In FIG 2, select words are numerically sequentially referenced, but the selection is limited to the first word in a rectangular block and various select words in the text which are most likely to confuse a student of moderate capability. It is pointed out that the words that are numbered in FIG 2, comprise the same number as that same word appearing in that same position in FIG 1.

This registered arrangement is particularly useful in a mixed class wherein there are both severe and moderate reading deficient or dysfunctional students. Thus, severely dysfunctional students would have the text of FIG 1 before them and moderate dysfunctional students the text of FIG 2 before them. Corrections and explanations based upon registered reference to words can be given to all students, with FIG 1 students being specifically referenced to each specific word being discussed and FIG 2 students being forced to independently derive specific reference to words falling between those words which are numerically designated in their text. Students in a class may progress from the arrangement of FIG 1 to the arrangement of FIG 2 in the same class as a mark of their progress, with the teacher still maintaining the teaching advantage of registered reference for all students in the class.

In FIG 3, the text is the same as FIG 1 - 2, but no lines are rectangularly blocked, and a further reduced number of words in the text is superscript numerically referenced. This document is specifically referenced for 8-10 year old students who have mild deficiency or dysfunctional capabilities and the highest reading skills in the class. Thus, in a class containing severe, moderate and mild dysfunctional students, corrections and explanations based upon registered reference to words to the most severely dysfunctional students can be given by the teacher to all students, with FIG 1 students being challenged to strictly follow the

numerical sequence to find the specific word being referenced; FIG 2 students being challenged to independently interpolate the abbreviated numerical sequence of their document and apply their greater knowledge of words to independently find a specific word which might not be numbered; and FIG 3 students being even further  
5 challenged to independently interpolate between extremely abbreviated reference numbering to identify a word falling between those words numerically designated in their text.

As can be seen, differently numerically registered texts, can be effectively used in a single classroom containing a plurality of  
10 disparate dysfunctional readers, with the teacher giving a single notation reference that has meaning to all levels of ability, but equally challenges the recognition skills of those of higher ability level. Thus, the numerical reference to a single word in a classroom containing students at different levels of reading  
15 dysfunction, challenges a severely dysfunctional reader to find the number and word associated therewith within the sequence; challenges a moderate dysfunctional reader to derive the geographic location of a familiar word between closely spaced numerical references; and challenges a mildly dysfunctional reader to derive  
20 the geographic location of a familiar word between far spaced numerical references.